IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Louis A. Lippincott	Examiner: Hau H. Nguyen
Serial No.:	10/600,048	Group Art Unit: 2628
Filed:	June 19, 2003	Docket: 884.899US1
Title:	COMMUNICATIONS PORTS IN A DATA DRIVEN ARCHITECTURE	

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

This communication is in response to the Notification of Non-Compliant Appeal Brief under 37 CFR § 41.37 mailed on June 4, 2009. In compliance with MPEP 1206(I) and 37 C.F.R § 41.33(b)(1), Appellant submits an Amendment to the claims to cancel claims 25 and 27-30.

Further, in compliance with M.P.E.P § 1205.03(B) and 37 C.F.R. § 41.37(c)(1)(vi), Appellant submits the following corrected sections from Appellant's previously-submitted Appeal Brief filed on April 17, 2009 (hereinafter "the Appeal Brief"):

1. Section 3: STATUS OF THE CLAIMS;
2. Section 4: STATUS OF AMENDMENTS; and
3. CLAIMS APPENDIX.

Additionally, this response is accompanied by a Petition, as well as the appropriate fee, to obtain a one-month extension of the period for responding to the Notification of Non-Compliant Appeal Brief, thereby moving the deadline for response from July 4, 2009 to August 4, 2009.

3. STATUS OF THE CLAIMS

The present application was filed on June 19, 2003 with 30 claims. In response to the Office Action mailed September 2, 2005, an Amendment was filed to amend claim 10. In response to the Office Action mailed on April 28, 2006, an Amendment was filed to amend claims 1-2 and 5-6. In response to the Office Action mailed on October 16, 2006, an Amendment was filed to amend claims 1, 7, 13, 18 and 25 and to cancel claim 9, 11, 16, 20 and 26. With this response to Notification of Non-Compliant Appeal Brief, an Amendment is filed herewith to cancel independent claims 25 and 28 and their associated dependent claims 27 and 29-30 without comment, prejudice or disclaimer. Accordingly, claims 1-8, 10, 12-15, 17-19, and 21-24 stand rejected, remain pending, and are subject of the present Appeal.

4. STATUS OF AMENDMENTS

No amendments have been made subsequent to the Office Action dated April 17, 2008. However, with this Response to Notification of Non-Compliant Appeal Brief, an amendment to the claims pursuant to 37 C.F.R. § 41.33(b)(1) is being filed herewith to cancel claims 25 and 27-30 without comment, prejudice or disclaimer. This amendment has not yet been considered by the Examiner and therefore has not yet been entered.

However, Appellant submits that the Amendment should be entered because such cancellation does not affect the scope of any other pending claim in the proceeding. (See 37 C.F.R. § 41.33(b)(1).) In particular, independent claims 25 and 28 are canceled together with dependent claims 27 and 29-30, which depend from claims 25 or 28. No other claims depend from canceled independent claims 25 and 28. Therefore, no other pending claims are affected.

CLAIMS APPENDIX

1. An apparatus comprising:

a first processor having two or more processor elements and two or more input/output (I/O) ports coupled together by a first port ring that is within the first processor; and

a second processor having two or more processor elements and two or more I/O ports coupled together by a second port ring that is within the second processor, wherein the second processor is coupled to the first processor through at least one I/O port of a third port ring within a third processor, wherein the two or more I/O ports in the first processor, the second processor and the third processor are configured to establish a logical connection between the first processor and the second processor, the logical connection to originate at first processor and to traverse through the third processor and to complete at the second processor, wherein the logical connection is established based on other active logical connections that include at least one of the first processor, the second processor and third processor.

2. The apparatus of claim 1, wherein the two or more I/O ports of the first processor is not directly connected to the two or more I/O ports of the second processor.

3. The apparatus of claim 1, wherein the first processor, the second processor and the third processor are part of a number of processors in a point-to-point configuration.

4. The apparatus of claim 1, wherein the first processor is configured to transmit output from an image process operation to the second processor through the at least one I/O port of the port ring of the third processor based on a logical connection.

5. The apparatus of claim 4, wherein the two or more I/O ports of the first processor, the two or more I/O ports of the second processor and the at least one I/O port of the third processor comprise a First-In-First-Out memory.

6. The apparatus of claim 5, wherein the two or more I/O ports of the first processor, the two or more I/O ports of the second processor and the at least one port of the third processor comprise a receiver port and a transmitter port, wherein the first processor is configured to transmit the output based on a handshake protocol among the receiver ports and the transmitter ports of the first processor, the second processor and the third processor.

7. An apparatus comprising:

a number of image signal processors coupled together in a point-to-point configuration, wherein one image signal processor of the number of image signal processors includes at least one processor element and a port ring, wherein the port ring includes a number of ports, a port of the number of ports coupled to the other ports of the port ring and to a port of a port ring of a different image signal processor, wherein the number of ports within the port rings of the number of image signal processors are configured to establish logical connections between the number of image signal processors, wherein the logical connections are to originate at a source image signal processor of the number of image signal processors and to traverse a number of intermediate image signal processors of the number of image signal processors and to complete at a destination image signal processor of the number of image signal processors, wherein the source image signal processor is to transmit an initialize signal, prior to transmission of data along the logical connection, through the number of intermediate image signal processors to the destination image signal processor in the order that data is transmitted in the logical connection.

8. The apparatus of claim 7, wherein the at least one processor element in a first of the number of image signal processors is configured to perform one of a number of image process-based operations.

9. (Canceled).

10. The apparatus of claim 9, wherein the at least one processor element is configured to output a result of the one of the number of image process-based operations to a different processor element in a different image signal processor through one of the logical connections.

11. (Canceled).

12. The apparatus of claim 9, wherein the number of ports include a storage memory for storage of data between communicated among the number of image processors through the configured logical connections.

13. A system comprising:

a Complementary Metal Oxide Semiconductor (CMOS) sensor to capture image data;

an image processor comprising a number of expansion interfaces and a number of image signal processors, wherein at least one expansion interface of the number of expansion interfaces is configured to receive the image data to be captured by the CMOS sensor, wherein at least one image signal processor of the number of image signal processors comprises a processor element and a port ring having a number of input/output ports to couple the at least one image signal processor to other image signal processors in the image processor in a point-to-point configuration; and

a host processor to configure a number of logical connections among the number of image signal processors, wherein at least one logical connection is to originate at a source image signal processor of the number of image signal processors and to finish at a destination image signal processor of the number of image signal processors, wherein the at least one logical connection includes traversal through a number of ports of the port rings of at least one intermediate image signal processor of the number of image signal processors between the source image signal processor and the destination image signal processor.

14. The system of claim 13, wherein the at least one image signal processor comprises a hardware accelerator to execute image process operations.

15. The system of claim 13, wherein the image processor comprises a global bus coupled to the number of expansion interfaces and the number of image signal processors, independent of the point-to-point configuration among the number of image signal processors.

16. (Canceled).

17. The system of claim 13, wherein traversal through the number of ports of the port rings of the at least one intermediate image signal processor is independent of image process operations by processor elements within the at least one intermediate image signal processor.

18. A method comprising:

registering a logical connection with a number of ports of port rings of a number of image signal processors in a logical connection based on transmission of an initialization signal through the logical connection;

executing an image process operation; and

forwarding an output of the image process operation through ~~a~~ the logical connection that includes a data path through ~~a~~ the number of ports of port rings of ~~a~~ the number of image signal processors, independent of image process operations in the number of image signal processors.

19. The method of claim 18, wherein forwarding the output of the image process operation through the logical connection from one of the number of image signal processors to a different one of the number of image signal processors comprises,

transmitting a request signal from a transmitter port of the one of the number of image signal processors to a receiver port of the different one of the number of image signal processors; and

receiving, in response to the request signal, a grant signal from the receiver port to the transmitter port.

20. (Canceled).

21. The method of claim 18, wherein forwarding the output of the image process operation through the logical connection that includes the data path through the number of ports of the port rings of the number of image signal processors comprises forwarding the output of the image process operation through the logical connection that includes the data path through the number of ports of the port rings of the number of image signal processors, wherein the number of image signal processors are connected together through the number of ports in a point-to-point configuration.

22. A method comprising:

receiving configuration data for a logical connection established for transmission of image data from a source image signal processor to a destination image signal processor through a number of intermediate image signal processors;

registering the logical connection with ports of the source image signal processor, the destination image signal processor and the number of intermediate image signal processors; and

routing the image data through the ports of the logical connection, subsequent to registering the logical connection and independent of image process operations by processing elements within the number of intermediate image signal processors.

23. The method of claim 22, wherein registering the logical connection with the ports of the source image signal processor, the destination image signal processor and the number of intermediate image signal processors comprises transmitting an initialize signal that is transmitted along a path of the logical connection that the image data is routed.

24. The method of claim 22, wherein registering the logical connection with the ports of the source image signal processor, the destination image signal processor and the number of intermediate image signal processors comprises registering point-to-point connections between the ports of the logical connection.

25-30. (Canceled).

Remarks

This communication is in response to the Notification of Non-Compliant Appeal Brief mailed on June 4, 2009. The Notification of Non-Compliant Appeal Brief indicated that only the defective sections of the Appeal Brief were required to be resubmitted, which defective sections were indicated to include the Status of the Claims and the Claims Appendix. With this response, Appellant submits an Amendment under 37 C.F.R. § 41.33(b)(1), a replacement Status of the Claims, a replacement Status of the Amendments, and a replacement Claims Appendix. Appellant submits that, with this response, the Appeal Brief is in full compliance with 37 C.F.R. § 41.37. Accordingly, Appellant respectfully requests acceptance of the replacement sections and advancement of the pending Appeal.

Accompanying Amendment under 37 C.F.R. § 41.33(b)(1)

With this Response to Notification of Non-Compliant Appeal Brief, Appellant submits an Amendment under C.F.R. § 41.33(b)(1) to cancel claims 25 and 27-30 without comment, prejudice or disclaimer. The Amendment has not yet been considered or entered by the Examiner.

Appellant submits that such cancellation does not affect the scope of any other pending claim in the proceeding. In particular, independent claims 25 and 28 are canceled together with dependent claims 27 and 29-30, which depend from claims 25 or 28. No other claims depend from canceled independent claims 25 or 28 and no other amendments to the claims are made. Therefore, no other pending claims are affected. Accordingly, pursuant to 37 C.F.R. § 41.33(b)(1), Appellant requests consideration and entry of the Amendment.

Replacement of Section 3 of the Appeal Brief

The Notification of Non-Compliant Appeal Brief indicated that the Status of the Claims in Section 3 of the Appeal Brief was not consistent with the cancellation of claims 25 and 27-30 identified in the Claims Appendix. With this response, Appellant submits a replacement Section 3 including a Status of the Claims that is believed to be consistent with both the Amendment and the Claims Appendix, which are submitted herewith. Accordingly, Appellant submits that the Status of the Claims is now in compliance with 37 C.F.R. § 41.37.

Replacement of Section 4 of the Appeal Brief

The Notification of Non-Compliant Appeal Brief did not indicate that Section 4 required resubmission. However, since an Amendment under C.F.R. § 41.33(b)(1) to cancel claims 25 and 27-30 is submitted herewith, the Status of Amendments is changed, necessitating resubmission of a corrected Status of Amendments section, which is provided herewith and which identifies the Amendment submitted herewith. Accordingly, Appellant respectfully requests replacement of Section 4 (Status of Amendments) to reflect Appellant's Amendment to cancel claims 25 and 27-30, which Amendment has not yet been considered or entered by the Examiner.

Replacement of Claims Appendix

The Notification of Non-Compliant Appeal Brief required resubmission of the Claims Appendix. In particular, the previously submitted Claims Appendix omitted any reference to canceled claims 9, 11, 16, 20, or 26. Appellant submits that 37 C.F.R. § 41.37(c)(1) and M.P.E.P. § 1205.02 require the Appeal Brief to include "An appendix containing a copy of the claims involved in the appeal." The rules make no mention of the Claims Appendix including canceled claims. Nevertheless, with this response, a replacement Claims Appendix is provided that includes references to each of the claims, including the canceled claims.

Conclusion

With this response, Appellant believes the Appeal Brief to be in full compliance with 37 C.F.R. § 41.37. Appellant respectfully requests acceptance of the replacement sections. The Examiner is invited to telephone Appellant's attorney at (512) 492-6407 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(512) 492-6407

Date August 4, 2009

By R. Michael Reed
R. Michael Reed
Reg. No. 59,066